



**AUG. 6, 2009**

## **HEALTH UPDATE**

### **New ACIP Recommendations For Rabies Post-Exposure Prophylaxis**

This health update provides new information regarding the management of rabies exposures, an update on the availability of rabies biologics and the diagnosis of rabies in animals in North Dakota.

The Advisory Committee on Immunization Practices (ACIP) voted in June to change the recommendations for rabies post-exposure prophylaxis for rabies. A summary of the new provisional recommendations for the use of rabies vaccine follows.

#### ***Post-exposure Prophylaxis For Unvaccinated People***

Vaccine Use: A regimen of four 1-mL vaccine doses of rabies vaccine (either human diploid cell vaccine (HDCV) or purified chick embryo cell vaccine (PCECV) should be administered intramuscularly to previously unvaccinated persons with no immunosuppression. The first dose of the four-dose course should be administered as soon as possible after exposure. This date is considered day zero of the post-exposure prophylaxis series. Additional doses should then be administered on days three, seven, and 14 after the first vaccination. Considerations for the site of the intramuscular vaccination remain unchanged.

Human Rabies Immune Globulin (HRIG) Use: The recommendations for use of immune globulin remain unchanged. In all post-exposure prophylaxis regimens, except for persons previously vaccinated, HRIG should be administered concurrently with the first dose of vaccine. The recommended dose is 20 IU/kg (0.133 mL/kg) body weight. HRIG can be administered up through day seven of the vaccine series.

#### ***Post-Exposure Prophylaxis For Previously Vaccinated People***

The recommendations for the post-exposure management of previously vaccinated individuals remain unchanged. The recommendation includes people who have previously received complete vaccination regimens (pre-exposure or post-exposure) with a cell culture vaccine, or people who have been vaccinated with other types of vaccines and have previously had a documented rabies virus neutralizing antibody titer. These people should receive only two doses of vaccine; one on day zero (as soon as the exposure is recognized and administration of vaccine can be arranged) and the second on day three.

#### ***Post-Vaccination Serologic Testing***

No testing of healthy patients completing prophylaxis is necessary to document seroconversion, unless the person is immunosuppressed. When titers are obtained, specimens collected from one to two weeks after prophylaxis should completely neutralize challenge virus at a 1:5 serum dilution by the rapid fluorescent focus inhibition test (RFFIT).

### ***Precautions - Immunosuppression***

Immunosuppression results from a wide variety of conditions. Primary or secondary immunodeficiencies may significantly reduce immune responses to vaccines. Given the large variety of immunocompromising conditions, as well as subsequent alterations in degrees of clinically significant immunodeficiencies, the evaluation of a potentially immunocompromised patient, as well as the decision about proper immunization of the immunocompromised patient, ultimately lies with the attending physician.

For people with broadly defined immunosuppression, post-exposure prophylaxis should be administered using all five doses of vaccine, with the awareness that the immune response may still be inadequate. When administered to an immunosuppressed person, one or more serum samples should be tested for rabies virus neutralizing antibody by the RFFIT to ensure an acceptable antibody response.

The 2008 ACIP recommendations for the prevention of human rabies are otherwise unchanged, and are available at [www.cdc.gov/mmwr/preview/mmwrhtml/rr57e507a1.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/rr57e507a1.htm).

A copy of the information in this Health Update can be found at [www.cdc.gov/vaccines/recs/provisional/downloads/rabies-July2009-508.pdf](http://www.cdc.gov/vaccines/recs/provisional/downloads/rabies-July2009-508.pdf).

### ***Testing Sites***

During the 2009 legislative session, the legislature passed House Bill 1386 which amended the North Dakota Century Code. The amendment allows for the testing of animals for rabies at either the North Dakota Department of Health's Division of Laboratory Services in Bismarck or the North Dakota State University Veterinary Diagnostic Laboratory at Fargo. Rabies testing can be done at either laboratory regardless of whether there is a human exposure or not.

### ***Availability of Rabies Biologics***

Finally, on page three of this document you will find an updated version of the rabies, rattlesnake and black widow biologicals available in the state. With the limited availability of rabies vaccine in the United States, fewer health-care facilities are keeping stocks of the vaccine on hand.

If you have questions, comments or are in need of a rabies consult, please feel free to contact the North Dakota Department of Health Division of Disease Control at 701.328.2378 or 800.472.2180.

### ***Categories of Health Alert messages:***

- *Health Alert conveys the highest level of importance; warrants immediate action or attention.*
- *Health Advisory provides important information for a specific incident or situation; may not require immediate action.*
- *Health Update provides updated information regarding an incident or situation; no immediate action necessary.*
- *Health Information provides general information that is not necessarily considered to be of an emergent nature.*

*This message is being sent to local public health units, clinics, hospitals, physicians, tribal health, North Dakota Nurses Association, North Dakota Long Term Care Association, North Dakota Healthcare Association, North Dakota Medical Association, and hospital public information officers.*

# North Dakota Department of Health

## Division of Disease Control, 2009



### Biologics for Exposure to Rabies and Rattlesnakes\*

Health-Care Facility	Telephone	RIG (Rabies Immune Globulin)	Rabies Vaccine	Rattlesnake Antivenin
Belcourt - Public Health Service	701.477.6111	Yes	Yes	No
Bismarck - Medcenter One	701.323.5200	Yes	Yes	Yes
Bismarck - St. Alexius	701.530.7000	Yes	Yes	Yes
Bowman-Southwest Healthcare Services	701.523.5265	No	Yes	Yes
Devils Lake - Mercy Hospital	701.662.2131	No	Yes	No
Dickinson - St. Joseph's Hospital	701.264.4000	Yes	Yes	Yes
Elgin - Jacobson Memorial Hospital	701.584.2792	No	No	Yes
Fargo - Innovis Health	701.364.3300	Yes	Yes	No
Fargo - Meritcare Medical Group	701.234.6000	Yes	Yes	No
Grand Forks - Altru Health System	701.780.5158	Yes	Yes	No
Hettinger - West River Medical Center	701.567.4561	Yes	Yes	Yes
Jamestown - Jamestown Hospital	701.252.1050	Yes	Yes	No
Lisbon - Lisbon Medical Center	701.683.5241	Yes	Yes	No
Minot - Trinity Medical Center	701.857.5000	Yes	Yes	No
Rugby- Heart of America	701.776.5261	Yes	Yes	No
Watford City - McKenzie Co. Hospital	701.842.3000	No	No	Yes
Williston - Mercy Medical Center	701.774.7400	Yes	Yes	No

\* The above facilities are known to stock rabies and/or rattlesnake biologics. Other facilities not included may also stock these biologics.

*Prior to administration of rabies prophylaxis, suspect exposures should be individually evaluated to determine exact recommendations. If treatment for rabies is indicated, the treatment should include both rabies vaccine and rabies immune globulin (RIG) if the patient has not previously received post-exposure prophylaxis.*

#### **Rabies Vaccine, RIG and antivenin ordering Information**

Human diploid Imovax®, sanofi Pasteur, Phone: 800.822.2463 Website: [www.vaccineplace.com/products](http://www.vaccineplace.com/products)

Purified chick embryo cell, RabAvert®, Novartis, Phone: 800.244.7668, Website: [www.rabavert.com](http://www.rabavert.com)

Imogam® sanofi Pasteur, Rabies-HT Phone: 800.822.2463, Website: [www.vaccineplace.com/products/](http://www.vaccineplace.com/products/)

HyperRab™, Talecris Biotherapeutics S/D Bayer Biological Products, Phone: 800.243.4153, Website: [www.talecris-pi.info](http://www.talecris-pi.info)

Rattlesnake antivenin is available from Wyeth Pharmaceuticals (1.800.934.5556) and Savage Laboratories (1.800.231.0206)

Black widow spider antivenin is available from Merck & Company Inc. (1.800.637.2579)

There are no known stocks of black widow spider antivenin in North Dakota.

**The Division of Disease Control is available for consultation and assistance 24 hours a day, 7 days a week by calling 701.328.2378 or toll-free 1.800.472.2180.**